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COMPARATIVE STUDY OF OYSTER MUSHROOM (*PLEUROTUS FLORIDA*) CULTIVATION ON PHYSICALLY AND CHEMICALLY TREATED PADDY STRAW

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Abstract:

Pleurotus florida is a common edible mushroom which is rich in carbohydrates, proteins and other nutrients. The present study was carried out to evaluate carbohydrate and protein contents of mushroom cultivated on physically and chemically sterilized paddy straw. The physical method of sterilization on the substrate has the highest carbohydrate and protein content (20 mg/ml, 10 mg/ml) and the chemical method of sterilization on the substrate has 12 mg/ml of carbohydrate and 5 mg/ml of protein. Phytochemical screening of aqueous extract showed the presence of secondary metabolites such as alkaloids and flavonoids. On the basis of the observation of the present study, consumption of chemically treated mushroom leads to health issue in humans and hence physically treated mushroom is recommended.

Keywords: Edible mushroom, carbohydrate, protein, sterilization, phytochemical screening.